



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,965	02/28/2002	Nelson F. Martinez	CS10862	2203

20280 7590 05/14/2003

MOTOROLA INC
600 NORTH US HIGHWAY 45
LIBERTYVILLE, IL 60048-5343

EXAMINER

OSORIO, RICARDO

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 05/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,965

Applicant(s)

MARTINEZ, NELSON F.

Examiner

RICARDO L OSORIO

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 3
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9 and 19-20, drawn to a housing comprising electro-chromic material, classified in class 345, subclass 49.
 - II. Claims 10-18 and 21-23, drawn to a housing having a variable input responsive variable appearance portion, classified in class 445, subclass 90.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a housing comprising electro-chromic material, which does not require a housing comprising a variable input responsive variable appearance portion. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Roland Bowler on 5-7-2003 a provisional election was made without traverse to prosecute the invention of group II, claims 10-18 and 21-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9 and 19-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DETAILED ACTION

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 10-13, 21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Lehtiniemi et al (6,466,299).

Regarding claims 10 and 21, Lehtiniemi teaches of a wireless communications handset (Fig. 1, reference character MS) comprising electronic hardware (it is inherent that a wireless communication handset, such as a mobile station comprises electronic hardware), a housing disposed about at least a portion of the electrical hardware, at least a portion of the housing comprising a variable user input responsive variable appearance portion (Fig. 1, reference character A1, and col. 3, lines 41-50), whereby the variable input responsive variable appearance portion of the housing changes appearance in response to a variable user input (col. 1, line 66- col. 2, line 14 and col. 3, lines 61-65).

Regarding claim 11, Lehtiniemi teaches that the portion of the housing is a photo-chromic material that changes color in response to variations of sunlight (col. 1, lines 25-30).

Regarding claims 12 and 23, Lehtiniemi teaches that the portion of the housing is a thermo-chromic material that changes appearance in response to variations in temperature (col. 3, lines 41-50).

Art Unit: 2673

Regarding claim 13, Lehtiniemi teaches that the portion of the housing is a gonio-chromic material that changes appearance in response to variations in angles of reflected light (col. 1, lines 18-21).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi et al in view of Bown (US 2002/0075135).

Regarding claim 14, Lehtiniemi fails to teach that the portion of the housing is a light emitting polymer material.

Brown teaches a housing having a portion that is a light emitting polymer material (page 1, col. 2, lines 21-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the light emitting polymer material, as taught by Brown, in the device of Lehtiniemi thus the number of components in the device may be reduced without loss of versatility or functionality (page 1, col. 2, lines 23-25).

9. Claims 15-16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi in view of Bown, as applied to claim 14 above, and further in view of Bailey (5,849,046).

Art Unit: 2673

Regarding claims 15-16 and 22, the device of Lehtiniemi, as anticipated by Bown, fails to teach of the variable input responsive variable appearance portion of the housing being an electro-chromic polymer, a color control circuit having a variable voltage output coupled across the electro-chromic material.

Bailey teaches of the variable input responsive variable appearance portion of the housing being an electro-chromic polymer (col. 2, lines 26-43 and col. 4, lines 12-16), a color control circuit having a variable voltage output coupled across the electro-chromic material (col. 7, line 49-col. 8, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the electrochromic material, as taught by Bailey, in the combined device of Lehtiniemi and Bown because, since the device does not rely on heat, the thermal mass of the battery will not affect the operation of the device (col. 8, line 61-63).

10. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi in view of Bown and Bailey as applied to claims 15-16 and 22 above, and further in view of IDS article ("Conducting Polymers and Electrochromic Devices", hereafter referred to as the IDS web article).

Regarding claims 17-18, Lehtiniemi, as anticipated by Bown and Bailey, fails to teach of the electrochromic material including an anodically coloring polymer and a cathodically coloring layer separated by a solid-state get electrolyte layer, the anodically and cathodically coloring layers disposed between first and second transparent conducting layers, the control circuit having a first output coupled to the first transparent conducting layer, the control circuit having a second output coupled to the second transparent conducting layer by a variable resistance element, and

Art Unit: 2673

the first and second transparent conducting layers disposed between the first and second insulating layers.

The IDS web article teaches of the electrochromic material including an anodically coloring polymer and a cathodically coloring layer (see Fig 4, Electrochromic Polymers) separated by a solid-state gel electrolyte layer (see Fig. 4, Gel Electrolyte), the anodically and cathodically coloring layers disposed between first and second transparent conducting layers (Fig. 4, ITO Layers), the control circuit having a first output coupled to the first transparent conducting layer, the control circuit having a second output coupled to the second transparent conducting layer by a variable resistance element (see Fig. 4, the power supply is connected to both the first and second transparent conductors-ITO layers. The use of a variable resistance to control the color is inherent since for the voltage to change, the resistance also needs to change), and the first and second transparent conducting layers disposed between the first and second insulating layers (see Fig. 4, Insulating Substrates).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the electro-chromic layer order, as taught by the IDS web article, in the combined device of Lehtiniemi, Bown and Bailey because these combination obtains high contrast, rapid switching electrochromic devices of various colors (see first paragraph under Fig. 4).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

Art Unit: 2673

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Technology Center 2600 Customer Service
Office whose telephone number is (703) 306-0377.

Ricardo L. Osorio
Examiner
Art Unit: 2673

RLO
May 8, 2003



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600